CCS Projects Selected for DOE Funding
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Show Details

Michele, I misspoke earlier about the number of projects that received DOE funding. There are three, not four. Here are the details on the successful projects.

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Large-Scale Industrial CCS Projects Selected for Continued Testing

Washington, D.C. Three Recovery Act funded projects have been selected by the U.S. Department of Energy (DOE) to continue testing large-scale carbon capture and storage (CCS) from industrial sources.

The projects located in Texas, Illinois, and Louisiana were initially selected for funding in October 2009 as part of a $1.4 billion effort to capture carbon dioxide (CO2) from industrial sources for storage or beneficial use. The first phase of research and development (R&D) included $21.6 million in Recovery Act funding and $22.5 million in private funding for a total initial investment of $44.1 million.

The successful development of advanced technologies and innovative concepts that reduce CO2 atmospheric emissions is a key objective of the Obama Administrations effort to help mitigate the effects of climate change. CO2 is a major greenhouse gas and contributor to global climate change. CCS which includes technologies for capturing, transporting, and permanently storing carbon dioxide emissions in geological formations is viewed by many experts as an important part of a portfolio strategy for confronting the challenge.

The projects announced today are aimed at testing large-scale industrial carbon capture and storage, an important step in moving CCS technology toward eventual commercial deployment. In 2009, the industrial sector accounted for slightly more than one-quarter of total U.S. CO2 emissions of 5,405 million metric tons from energy consumption, according to data from DOEs Energy Information Administration. The three projects are expected to capture and store a total of 6.5 million tons of CO2 per year, and increase domestic production of oil by more than 10 million barrels of oil per year by the end of the demonstration period in September 2015.

Following successful completion of their Phase 1 activities, the three projects will now enter into Phase 2 for design, construction, and operation. The second phase of these projects includes $612 million in Recovery Act funding and $368 million in private sector cost-sharing for a total investment of $980 million. The projects will be managed by the Office of Fossil Energys National Energy Technology Laboratory (NETL). CCS research is a major focus of the FE/NETL research program.

Potential additional applications for funding of large-scale industrial carbon capture and storage projects are pending further clarification and review.

Descriptions of the selected projects follow:

- **Air Products & Chemicals, Inc.** (Allentown, Pa.)Air Products will partner with Denbury Onshore LLC to capture and sequester 1 million tons of CO2 per year from existing steam-methane reformers in Port Arthur, Texas, starting in November 2012. The CO2 will be delivered via a 12-mile connector pipeline to an existing Denbury interstate CO2 pipeline and sequestered via use for enhanced oil recovery in the West Hastings oilfield. The project

team includes Air Products & Chemicals, Denbury Onshore LLC, the University of Texas Bureau of Economic Geology, and Valero Energy Corporation. (DOE share: $253 million)

- **Archer Daniels Midland Corporation** (Decatur, Ill.)The project will capture and sequester 1 million tons of CO2 per year from an existing ethanol plant in Illinois, starting in August 2012. The CO2 will be sequestered in the Mt. Simon Sandstone, a well-characterized saline reservoir located about one mile from the plant. The project team includes Archer Daniels Midland, Schlumberger Carbon Services, and the Illinois State Geological Survey. (DOE share: $99 million)
- **Leucadia Energy, LLC** (New York, N.Y.)Leucadia and Denbury Onshore LLC will capture and sequester 4.5 million tons of CO2 per year from a new methanol plant in Lake Charles, La. The CO2 will be delivered via a 12-mile connector pipeline to an existing Denbury interstate CO2 pipeline and sequestered via use for enhanced oil recovery in the West Hastings oilfield, starting in April 2014. The project team includes Leucadia Energy, Denbury, General Electric, Haldor Topsoe, Black & Veatch, Turner Industries, and The University of Texas Bureau of Economic Geology. (DOE share: $260 million)

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